

iv) cam member means integral with said medial and lateral condyles and located outboard thereof, said cam member means having an anteriorly located concave cam member surface and a posteriorly located convex cam member surface;

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(cont)
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48. b) a tibial component including:

i) multi-radius tibial plateau bearing surface means for receiving said medial and lateral condyles for rolling and sliding movement thereon; and
ii) follower member means integral with said bearing surface means for receiving the cam surfaces of said cam member means for rotational and sliding movement thereon; and

c) hinge means associated with and hingeably connecting said femoral component and said tibial component, said hinge means having a variable axis of rotation and enabling the rotational and sliding contact and anterior-posterior translation to take place between said femoral component and said tibial component;

d) the cam member surfaces of said cam member means being in contact with said follower member means for substantially the entire flexion range of the knee.

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48. (Amended) A total knee prosthesis according to Claim 47, wherein said tibial hinge component comprises a tibial post having opposed lateral peripheral surfaces and an upper peripheral surface; said intercondylar [space comprises an intercondylar] housing [having] has lateral wall surfaces and a roof surface; and wherein respective lateral wall surfaces and lateral peripheral surfaces engage each other in sliding contact, and said roof surface and said upper peripheral surface engage each other in rolling and sliding contact.

B3

51. (Amended) A hinge assembly for use in a knee prosthesis adapted to provide hingeable connection between a femoral component and a tibial component of such knee prosthesis, to enable anterior-posterior translation to take place between said femoral component and said tibial component and to offer total posterior stabilization thereto, said hinge assembly comprising:

- a) plural spaced apart femoral hinge components;
- b) a tibial hinge component located between said femoral hinge components;
- c) a hinge axis comprising a hinge pin extending between said femoral hinge components and said tibial hinge components; and
- d) hinge-related posterior stabilization means comprising cam means defined by said tibial hinge component and follower means defined by said femoral hinge components.

B4

53. (Amended) A hinge assembly according to Claim 52, wherein said tibial hinge component comprises a tibial post having opposed lateral peripheral surfaces and an upper peripheral surface; said intercondylar [space comprises an intercondylar] housing [having] ~~has~~ lateral wall surfaces and a roof surface; and wherein respective lateral wall surfaces and lateral peripheral surfaces engage each other in sliding contact, and said roof surface and said upper peripheral surface engage each other in rolling and sliding contact.

Please add the following new Claim:

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-- *15* *58.* A hinge assembly according to Claim *55* wherein said slot is oriented with its longitudinal dimension in a horizontal plane when said hinge assembly is installed and in use. -- *adapted to be*

REMARKS

Reconsideration of this Application is respectfully requested. Claims 41-58 as renumbered by the Examiner and as amended herein, are under examination and consideration.

Initially, the Examiner has called for a revision of the title to one that is more descriptive of the invention. A revised title is proposed above, and favorable consideration thereof is requested.

The Examiner has also objected to the Specification on the basis that errors in spelling and usage are present that require correction. The Specification has been reviewed and amendments have been made where appropriate. Withdrawal of this objection is accordingly requested.

Claims 41-57 have been rejected under 35 U.S.C. §112, second paragraph, on the basis that certain misspellings exist and that terms lacking in antecedent basis are present. Both bases have been addressed by the amendments above, and withdrawal of this ground of rejection is likewise requested.